

**REMARKS**

Entry of the foregoing, reexamination and reconsideration of the above-identified application are respectfully requested.

By the present Amendment, the typographical error in Claim 6 has been corrected thereby obviating the claim objection set forth in the Action.

The claims have been rejected under 35 U.S.C. §103 as being "obvious" based on *Sekioka* (U.S. Patent No. 6,899,752) in view of the '569 European Patent document (EP 0 846569). Furthermore, Claims 1-6 and 8 have been rejected as being "obvious" based on the '569 European Patent document alone. For the reasons that follow, however, these rejections should be withdrawn.

The present invention relates to a thermal ink which comprises a color former, a color developer, a sensitizer, and at least one pigment. The color former for the thermal ink comprises 3-dibutylamino-6-methyl-7-anilino-fluoran. The color developer comprises bisphenol A. And, the sensitizer comprises dimethyl terephthalate. None of the prior art applied in the Action would suggest the particularly claimed combination, much less the unexpected results which can be obtained.

Indeed, *Sekioka* relates to fluorescent inks which are invisible under normal lighting conditions but become visible when subjected to light of a specific wavelength. These inks are used in security applications. In passing, *Sekioka* states (col. 7 lines 26-58) that the substrates used for the inks may also carry a heat-sensitive or pressure-sensitive coloring ink composition, and describes such compositions briefly. This disclosure, however, is not particularly relevant. It merely relates to a conventional thermal coating layer, of the type used in association with thermal printers. As acknowledged by the Examiner, *Sekioka* does not mention the use of any of 3-dibutylamino-6-methyl-7-anilino-fluoran, bisphenol A or dimethyl terephthalate, all named ingredients of the ink of the present invention.

**EP 0 846 569** describes coating compositions for use in preparing thermal paper which include, in addition to the conventional components (a dye precursor, a developer, and a binder, together with additional optional materials) the additive 1-phenyl-2,2,2-trichloroethyl acetate. However, the authors of **EP 0 846 569** were concerned with the *stability of an image* obtained once a thermal image has been produced on thermal paper by passing through a thermal printer. Indeed, page 2 of **EP 0 846 569** states: "This invention particularly concerns a thermally-responsive record material capable of forming a non-reversible image resistant to fade or erasure, and having improved image retention density....Some drawbacks of some thermally responsive record materials ....are the undesirable tendency ...upon forming an image to not retain that image in its original integrity over time....A need exists to improve stability of thermal record materials to improve the archival capabilities of such record materials". Furthermore, the working Examples of **EP 0 846 569** set out to show that the invention of **EP 0 846 569** meets this objective. In this regard, the table of results on p. 8 of **EP 0 846 569** gives the results obtained in four different storage stability tests. In all cases, what is measured is the fading of the developed image. The composition of **EP 0 846 569** (Example 1) is compared with five comparative compositions (Examples 2 to 6), and in all the tests, the image obtained using the composition of Example 1 is shown to fade less the images obtaining using the comparative compositions.

In contrast, the present invention is concerned with the fact that thermal papers tend to discolor on storage *before development of an image* using a thermal printer. This objective is stated in the passage bridging p. 2-3 of the present Specification, and Example 2 shows clearly that this objective is achieved. It is clear from their description that the authors of **EP 0 846 569** were not concerned in any way with this pre-development discoloration.

The present invention is a specific combination of four ingredients, suitable for use in a thermal ink (that is, suitable for printing onto a substrate rather than for application as a coating, as is conventional for thermal papers), and providing improved storage stability of the resulting thermal paper. And experimental evidence is provided in the Specification showing that the desired effect is achieved. Nothing in *EP 0 846 569*, nor in *Sekioka*, would have suggested that the particular combination of ingredients would provided this beneficial result. The Action suggest that it would have been obvious to one of ordinary skill in the art to combine 3-dibutylamino-6-methyl-7-anilino-fluoran, bisphenol A or dimethyl terephthalate. However, there is nothing in the teachings of *EP 0 846 569* or *Sekioka* which would have incentivized that person to do so, or pointed him in that particular direction. Nor are the highly beneficial results obtained by using that combination suggested in *EP 0 846 569* or *Sekioka*. Accordingly, the invention is not obvious from the teachings of either *EP 0 846 569* or *Sekioka* - alone or in combination.

For the reasons set forth above, it is respectfully submitted that the claims are patentable and the issuance of a Notice of Allowance is next in order.

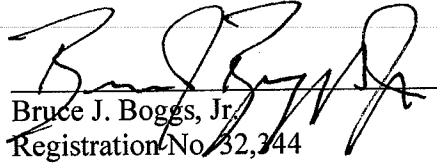
In the event that there are any questions relating to this Amendment, or to the application in general, it would be appreciated if the Examiner would contact the undersigned attorney by telephone at (202) 373-6000 so that prosecution of the application may be expedited.

The Director is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 50-2518.

Respectfully submitted,  
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